

17. (Once Amended.) A purified polypeptide comprising an amino acid sequence selected from the group consisting of:

- a) an amino acid sequence of SEQ ID NO:1,
- b) a naturally-occurring amino acid sequence having at least 90% sequence identity to the sequence of SEQ ID NO:1,
- c) a biologically-active fragment of the amino acid sequence of SEQ ID NO:1, wherein said biologically-active fragment has HuMIM17 activity, and
- d) an [immunogenic] immunologically active fragment of the amino acid sequence of SEQ ID NO:1, wherein said immunologically active fragment generates an antibody that specifically binds to the polypeptide encoded by SEQ ID NO:1.

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18. (Reiterated.) An isolated polypeptide of claim 17, having a sequence of SEQ ID NO:1.

19. (Reiterated.) An isolated polynucleotide encoding a polypeptide of claim 17.

20. (Reiterated.) An isolated polynucleotide encoding a polypeptide of claim 18.

21. (Reiterated.) An isolated polynucleotide of claim 20, having a sequence of SEQ ID NO:2.

22. (Reiterated.) An expression vector comprising a promoter sequence operably linked to a polynucleotide of claim 19.

23. (Reiterated.) A host cell transformed with an expression vector of claim 22.

24. (Reiterated.) A method for producing a polypeptide of claim 17, the method comprising:

- a) culturing a host cell under conditions suitable for expression of the polypeptide, wherein said host cell is transformed with an expression vector, and said

expression vector comprises a promoter sequence operably linked to a polynucleotide encoding the polypeptide of claim 17, and

- b) recovering the polypeptide so expressed.

25. (Reiterated.) A method of claim 24, wherein the polypeptide has the sequence of SEQ ID NO:1.

26. (Reiterated.) An isolated polynucleotide comprising a sequence selected from the group consisting of:

- a) a polynucleotide sequence of SEQ ID NO:2,
- b) a naturally-occurring polynucleotide sequence having at least 90% sequence identity to the sequence of SEQ ID NO:2,
- c) a polynucleotide sequence complementary to a),
- d) a polynucleotide sequence complementary to b) and
- e) a ribonucleotide equivalent of a)-d).

27. (Reiterated.) An isolated polynucleotide comprising at least 60 contiguous nucleic acids of claim 26.

28. (Reiterated.) A method for detecting a target polynucleotide in a sample, said target polynucleotide having a sequence of a polynucleotide of claim 26, the method comprising:

- a) hybridizing the sample with a probe comprising at least 20 contiguous nucleotides comprising a sequence complementary to said target polynucleotide in the sample, and which probe specifically hybridizes to said target polynucleotide, under conditions whereby a hybridization complex is formed between said probe and said target polynucleotide or fragments thereof, and
- b) detecting the presence or absence of said hybridization complex, and, optionally, if present, the amount thereof.

29. (Reiterated.) A method of claim 28, wherein the probe comprises at least 60 contiguous nucleotides.

30. (Reiterated.) A method for detecting a target polynucleotide in a sample, said target polynucleotide having a sequence of a polynucleotide of claim 26, the method comprising:

- a) amplifying said target polynucleotide or fragment thereof using polymerase chain reaction amplification, and
- b) detecting the presence or absence of said amplified target polynucleotide or fragment thereof, and, optionally, if present, the amount thereof.

31. (Reiterated.) An isolated antibody which specifically binds to a polypeptide of claim 17.

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32. (Once Amended.) A [pharmaceutical] composition comprising an effective amount of a polypeptide of claim 17 and a pharmaceutically acceptable excipient.

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33. (Once Amended.) A [pharmaceutical] composition of claim 32, wherein the polypeptide has the sequence of SEQ ID NO:1.

34. (Reiterated.) A method for treating a disorder which is associated with decreased expression of the polypeptide of claim 17 comprising administering to a subject in need of such treatment an effective amount of the pharmaceutical composition comprising said polypeptide and a pharmaceutically acceptable excipient.

35. (Reiterated.) A purified agonist which specifically binds to and modulates the activity of the polypeptide of claim 17.

36. (Reiterated.) A purified antagonist which specifically binds to and inhibits the activity of the polypeptide of claim 17.

37. (Reiterated.) A pharmaceutical composition comprising the antagonist of claim 36 in conjunction with a suitable pharmaceutical carrier.

38. (Reiterated.) A method for treating a disorder which is associated with increased expression of the polypeptide of claim 17 comprising administering to a subject in need of such treatment an effective amount of the pharmaceutical composition comprising an antagonist which specifically binds to and inhibits the activity of said polypeptide.

39. (Reiterated.) A method for screening a compound for effectiveness as an agonist of a polypeptide of claim 17, the method comprising:

- a) exposing a sample comprising a polypeptide of claim 17 to a compound, and
- b) detecting agonist activity in the sample.

40. (Reiterated.) A method for screening a compound for effectiveness as an antagonist of a polypeptide of claim 17, the method comprising:

- a) exposing a sample comprising a polypeptide of claim 17 to a compound, and
- b) detecting antagonist activity in the sample.

41. (Reiterated.) A method for screening a compound for effectiveness in altering expression of a target polynucleotide, wherein said target polynucleotide comprises a sequence of claim 20, the method comprising:

- a) exposing a sample comprising the target polynucleotide to a compound, and
- b) detecting altered expression of the target polynucleotide.

42. (Reiterated.) A method for identifying a specific antifungal agent, the method comprising:

- a) combining at least one agent with a fungal TIM17,
- b) identifying an agent which binds to the fungal TIM17,
- c) combining the agent with the human mitochondrial membrane protein of claim 17, and